

AMENDMENT OF CLAIMS:

1. (Currently amended) A detonation device for selectively perforating a tubular with a designated explosive charge located downhole in a well bore, said device comprising:

the tubular;

the designated explosive charge attached to the tubular;

a wireless receiver;

microprocessor and control means connected to said wireless receiver;

an explosive bridge wire;

high voltage supply means; and

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energy storage and trigger means, whereby a coded signal received by said wireless receiver is decoded by the micro processor and, if the code designates that the respective explosive charge is to be detonated, sends a signal to the trigger means which will supply high voltage to explosive bridge wire which will create sufficient energy to initiate detonation of the respective explosive charge and thereby perforating the tubular.

2. (Original) The detonation device according to claim 1, wherein said coded signal allows selective detonation of a plurality of explosive charges individually.

3. (Original) The detonation device according to claim 1, wherein said coded signal allows selective detonation of a plurality of explosive charges in sequence.

4. (Original) The detonation device according to claim 1, wherein said coded signal allows selective detonation of a plurality of explosive charges in any desired pattern.

5. (Previously amended) The detonation device according to claim 1 wherein the coded signal does not transmit the power to initiate detonation of the explosive charge thereby reducing the risk of accidental detonation of the explosive charge.

6. (Previously amended) The detonation device according to claim 1 wherein said explosive bridge wire comprises:

circuit board having an aperture therein;

an electrical circuit formed on said circuit board with a portion of the electrical circuit overlying said aperture forming a bridge, said bridge having dimensions smaller than the rest of the electrical circuit so that, upon application of power to the electrical circuit, the bridge will flash vaporize causing detonation of the nearby explosive charge.

7. (Original) The detonation device according to claim 1 wherein said microprocessor includes digital signal processing logic.

8. (Currently amended) A method for selectively perforating a tubular with a designated explosive charge located downhole in a well bore, comprising the steps of:

attaching the explosive charge to the tubular;

providing a detonating device having a wireless receiver, microprocessor and control means connected to said wireless receiver, at least one explosive bridge wire, high voltage supply means, and energy storage and trigger means; and

transmitting a coded signal to said wireless receiver to be decoded by the microprocessor

and, if the code designates that the respective explosive charge is to be detonated, sends a signal to the trigger means which supplies high voltage to explosive bridge wire causing it to substantially instantly vaporize creating sufficient energy to initiate detonation of the respective explosive charge and thereby perforating the tubular.

9. (Original) The method according to claim 8, wherein said coded signal allows selective detonation of a plurality of explosive charges individually.

10. (Original) The method according to claim 8, wherein said coded signal allows selective detonation of a plurality of explosive charges in sequence.

11. (Original) The method according to claim 8, wherein said coded signal allows selective detonation of a plurality of explosive charges in any desired pattern.

12. (Previously amended) The method according to claim 8 wherein the coded signal does not transmit the power to initiate detonation of the explosive charge thereby reducing the risk of accidental detonation of the explosive charge.

13. (Previously amended) The method according to claim 8 wherein said explosive bridge wire comprises:

circuit board having an aperture therein;

an electrical circuit formed on said circuit board with a portion of the electrical circuit overlying said aperture forming a bridge, said bridge having dimensions smaller than the rest of the

electrical circuit so that, upon application of power to the electrical circuit, the bridge will flash
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vaporize causing detonation of the nearby explosive charge.

14. (Previously amended) The method according to claim 8 wherein said microprocessor includes
digital signal processing logic.
